

What is claimed is:

1. An image forming device comprising:

a main casing having a first surface and a second surface opposing the first surface;

5 a processing unit that is detachably mounted in the main casing and that forms images on a recording medium;

a first power source circuit board disposed inside the main casing, the first power source circuit board outputting a drive voltage to the processing unit; and

10 a second power source circuit board disposed inside the main casing, the second power source circuit board outputting a drive voltage at a higher voltage than the drive voltage outputted by the power source circuit board, wherein

15 the components of the power source circuit board generate larger amount of heat than the second power source circuit board;

the first surface is formed with a first exhaust outlet exhausting air from the main casing; and

20 the first power source circuit board is disposed downstream of the second power source circuit board in an air passage direction in which the air passes through the main casing and is discharged through the first exhaust outlet.

25 2. The image forming device according to claim 1,

wherein the components of the first power source circuit board include at least one of a transformer and a regulator.

3. The image forming device according to claim 2,  
wherein the second power source circuit board is a high-  
5 voltage power source circuit board.

4. The image forming device according to claim 1,  
wherein the first power source circuit board has heat  
dissipating plates that dissipate heat generated by the  
components of the first power source circuit board, the heat  
10 dissipating plates being disposed such that a largest  
surface of each heat dissipating plate is disposed along the  
air passage direction.

5. The image forming device according to claim 1,  
further comprising a drive motor that generates a driving  
15 force, wherein the second surface of the main casing is  
formed with an intake hole through which air is supplied  
into the main casing, the air flowing over the first power  
source circuit board and being exhausted through the first  
exhaust outlet, the drive motor being disposed near the  
20 intake hole.

6. The image forming device according to claim 1,  
further comprising a first fan disposed in confrontation  
with the first exhaust outlet for exhausting air from the  
main casing.

25 7. The image forming device according to claim 6,

further comprising a second fan, wherein the first surface of the main casing is formed with a second exhaust outlet, and the second fan is disposed in confrontation with the second exhaust outlet of the main casing for exhausting air from the main casing.

8. The image forming device according to claim 7, further comprising a first partitioning wall, wherein the main casing defines an internal space, and the first partitioning wall separates the internal space into a first air path formed by the first fan and a second air path formed by the second fan.

9. The image forming device according to claim 7, further comprising:

a conveying unit that conveys the recording medium in a conveying direction; and

a fixing unit that is disposed downstream of the processing unit in the conveying direction and that fixes the images onto the recording medium, wherein

the second fan is disposed closer to the fixing unit than to the processing unit.

10. The image forming device according to claim 9, wherein the second fan is disposed above the fixing unit.

11. The image forming device according to claim 9, further comprising a second partitioning wall that is provided between the fixing unit and the processing unit.

12. The image forming device according to claim 11,  
wherein the second partitioning wall includes two walls  
disposed between the fixing unit and the processing unit,  
the two walls defining an air passage therebetween, and the  
5 second fan exhausts the air having passed through the air  
passage.

13. The image forming device according to claim 11,  
wherein the main casing defines an internal space, and the  
second partitioning wall partitions the internal space into  
10 a third air path on the processing unit side and a fourth  
air path on the fixing unit side.

14. The image forming device according to claim 13,  
further comprising an ozone filter disposed in the third air  
path.

15. An image forming device comprising:

a main casing having a first surface and a second  
surface opposing the first surface;

a processing unit that is detachably mounted in the  
main casing and that forms images on a recording medium; and

20 a power source circuit board disposed inside the main  
casing for outputting a drive voltage to drive the  
processing unit, wherein

the first surface of the main casing is formed with a  
first exhaust outlet for exhausting air from the main  
25 casing; and

the power source circuit board is disposed near the first exhaust outlet.

16. The image forming device according to claim 15, further comprising a high-voltage power source circuit board disposed below the processing unit, the high-voltage power source circuit board outputting a drive voltage of a higher voltage than the drive voltage outputted by the power source circuit board, wherein the power source circuit board is positioned closer to the first exhaust outlet than is the high-voltage power source circuit board, and the components of the power source circuit board generate greater amount of heat than the high-voltage power source circuit board.

17. The image forming device according to claim 15, wherein the power source circuit board has heat dissipating plates that dissipate heat generated by the components of the power source circuit board, the heat dissipating plates being disposed such that a largest surface of each heat dissipating plate is disposed along an air passage direction in which the air flows through the main casing.

18. The image forming device according to claim 15, further comprising a drive motor that generates a driving force, wherein the second surface of the main casing is formed with an intake hole through which air is supplied into the main casing, the air flowing over the power source circuit board and being exhausted through the first exhaust

outlet, the drive motor being disposed near the intake hole.

19. The image forming device according to claim 15,  
further comprising a first fan disposed in confrontation  
with the first exhaust outlet for exhausting air from the  
5 main casing.

20. The image forming device according to claim 19,  
further comprising a second fan, wherein the first surface  
of the main casing is formed with a second exhaust outlet,  
and the second fan is disposed in confrontation with the  
10 second exhaust outlet of the main casing for exhausting air  
from the main casing.

21. The image forming device according to claim 20,  
further comprising a first partitioning wall, wherein the  
main casing defines an internal space, and the first  
15 partitioning wall separates the internal space into a first  
air path formed by the first fan and a second air path  
formed by the second fan.

22. The image forming device according to claim 21,  
further comprising:

20 a conveying unit that conveys the recording medium in  
a conveying direction; and

a fixing unit that is disposed downstream of the  
processing unit in the conveying direction and that fixes  
the images onto the recording medium, wherein

25 the second fan is disposed closer to the fixing unit

than to the processing unit.

23. The image forming device according to claim 22,  
further comprising a second partitioning wall provided  
between the fixing unit and the processing unit, the second  
5 partitioning wall partitioning the second air path into a  
third air path on the processing unit side and a fourth air  
path on the fixing unit side.

24. The image forming device according to claim 23,  
further comprising an ozone filter disposed in the third air  
10 path.

25. The image forming device according to claim 24,  
further comprising a first frame and a second frame disposed  
within the main casing, wherein:

the first fan and the second fan are provided to the  
15 first frame;

the first partitioning wall bridges the first frame  
and the second frame;

the processing unit, the fixing unit, and the second  
fan are disposed above the first partitioning wall; and

20 the power source circuit board is disposed beneath the  
first partitioning wall.